

=====

Sequence Listing was accepted.

If you need help call the Patent Electronic Business Center at (866)
217-9197 (toll free).

Reviewer: markspencer

Timestamp: [year=2009; month=8; day=5; hr=11; min=38; sec=40; ms=856;]

=====

Application No: 10577061

Version No: 2.0

Input Set:

Output Set:

Started: 2009-08-04 14:13:52.678

Finished: 2009-08-04 14:13:53.358

Elapsed: 0 hr(s) 0 min(s) 0 sec(s) 680 ms

Total Warnings: 6

Total Errors: 0

No. of SeqIDs Defined: 8

Actual SeqID Count: 8

Error code	Error Description
W 213	Artificial or Unknown found in <213> in SEQ ID (1)
W 213	Artificial or Unknown found in <213> in SEQ ID (2)
W 213	Artificial or Unknown found in <213> in SEQ ID (3)
W 213	Artificial or Unknown found in <213> in SEQ ID (4)
W 213	Artificial or Unknown found in <213> in SEQ ID (5)
W 213	Artificial or Unknown found in <213> in SEQ ID (6)

SEQUENCE LISTING

<110> COGNE, MICHEL
SIRAC, CHRISTOPHE
BARDEL, MICAEL
DECOURT, CATHERINE
LE MORVAN, CAROLINE

<120> NON-HUMAN TRANSGENIC MAMMAL FOR THE CONSTANT REGION OF
THE CLASS A HUMAN IMMUNOGLOBULIN HEAVY CHAIN AND
APPLICATIONS THEREOF

<130> 40521U

<140> 10577061

<141> 2009-08-04

<150> PCT/FR2004/002701

<151> 2004-10-21

<150> FR 0312502

<151> 2003-10-24

<160> 8

<170> PatentIn version 3.5

<210> 1

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic primer

<400> 1

gagtaccggt gtctgggtca c

21

<210> 2

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic primer

<400> 2

gagctctatg attattgggtt aac

23

<210> 3

<211> 22

<212> DNA

<213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic primer

<400> 3
 gcatgatctg gacgaagagc at 22

<210> 4
 <211> 22
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic primer

<400> 4
 tcccctcaga agaactcgtc aa 22

<210> 5
 <211> 25
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic primer

<400> 5
 aagtcgacat ggacatgagg gtgcc 25

<210> 6
 <211> 27
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic primer

<400> 6
 ttctcgagac ttaggtttaa tctccag 27

<210> 7
 <211> 5161
 <212> DNA
 <213> Mus musculus

<400> 7
 acaggcctga gagaacagac tctggaaata gatgggactt acggagctaa gatctagagc 60
 tcattctacag agcagaatcc cagccaagag aacaaagaat actgactctc tctgttccc 120
 tactcctaga gttctaaaac acactatagg gaagggagcc tctagacctc cgtccattcc 180
 ccatcttgct cattccatct tcccatgtcc ccaggtctcc aagccacaga caccaccttt 240

cctattcacc cacctttctg tgtccctagg tccccaggcc atagtcacct cccccacac	300
cccgtcacc ctgccccatc tatgccccta gatgcttact taccagagtc ttttgtctga	360
cgtggggcta caagcatcta tgctccctaa gcacctactg ctgacctgta ggaccagct	420
ctgaaccaac tcatataagt aaatacagac tctccctgt cttaggatgg cccctgggt	480
caggaggaga cactgccaa ggaaccttct cttagagcac tgaactctc cctgtacca	540
cttaggacag acctgagacc tattattact gattaccaga gctctggcag tgaccacgga	600
ggagatagat ccacctgga cacaggaaac acagcaccag agatactgct tcatcacaac	660
agtagagtga cactttagac ttttaatttg gtcactttcc tgctgtagag gtgggatcag	720
aaagcaaaga gcagtatgag tgctgatag gcacccaagt acactataga gtactcatgg	780
tgaataaggt acctccatgg ctcccaggg aggggcactg cccaccccc accatcacag	840
acctttctcc atagttgata actcagacac aagtgaatga cagatggacc tccatctgct	900
cttattttaa aaagaagaca aacccccacag gctcgagaac tttagcgact gttttgagag	960
aatcattgg tccctgactc aagagatgac tggcagattg gggatcagaa taccatact	1020
ctgtggctag tgtgaggttt aagcctcaga gtccctgtgg tctctgactg gtgcaaggtt	1080
ttgactaagc ggagcaccac agtgctaact gggaccacgg tgacacgtgg ctcaacaaaa	1140
accttctgtt tggagctctc caggggcagc ctgagctatg aggaagtaga gaggcttgag	1200
aatctgagg aagaaaagag tagatctgag aggaaaggta gctttctgga ggtcaggaga	1260
cagtgcagag aagaacgagt tactgtggac aggtcttaga tggggaaaga atgagcaa	1320
gcaagcatca gaagggtgga tgcaatgtcc tgccaaggac ttaccaagag gatccccgga	1380
cagagcaggc aggtggagtt gactgagagg acaggatagg tgcaggcccc tctctgttt	1440
cctttctcct tctctgttt ccttcttctc ttgtcacagg tctcactatg ctagccaagg	1500
ctagcctgaa agattacat cctacagatg ggcccatcca gttgaattaa ggtggagatc	1560
tctccaaaca tctgagtttc tgaggcttg atgccactgg ggacgccaag ggactttggg	1620
atgggtttg ttggccccag atgaagggt acttcactgg gtctataatt actctgatgt	1680
ctaggaccag ggggctcagg tcaactcaggt caggtgagtc ctgcatctgg ggactgtggg	1740
gttcagggtg cctaaggcag gatgtggaga gagttagt ataggaacag aggcagaaca	1800
gagactgtgc tactggtact tcgatgtctg gggcacagg accacggtca ccgtctctc	1860
aggtaagctg gcttttttct ttctgcacat tccattctga aacgggaaa gatattctca	1920
gatctccca tgtcaggcca tctgccacac tctgcatgct gcagaagctt ttctgtaagg	1980

atagggctctt cactcccagg aaaagaggca gtacagaggct agctgcctgt ggaacagtga	2040
caatcatgga aaataggcat ttacattgtt aggctacatg ggtagatggg tttttgtaca	2100
cccactaaag ggggtctatga tagtgtgact actttgacta ctggggccaa ggcaccactc	2160
tcacagtctc ctcaggtgag tccttacaac ctctctcttc tattcagctt aaatagattt	2220
tactgcattt gttggggggg aaatgtgtgt atctgaattt cagggtcatga aggactaggg	2280
acaccttggg agtcagaaag ggtcattggg agccctggct gacgcagaca gacatcctca	2340
gctcccatac ttcattggcca gagatttata gggatcctgg ccagcattgc cgctaggtcc	2400
ctctcttcta tgctttcttt gtccctcact ggccctccatc tgagatcatc ctggagccct	2460
agccaaggat cattttattgt caggggtcta atcattgttg tcacaatgtg cctggtttgc	2520
ttactggggc caagggactc tgggtcactgt ctctgcagggt gagtccctaac ttctcccatt	2580
ctaaatgcat gttgggggga ttctgggcct tcaggaccaa gattctctgc aaacgggaat	2640
caagattcaa cccctttgtc ccaaagttga gacatgggtc tgggtcaggg actctctgcc	2700
tgctggtctg tgggtgacatt agaactgaag tatgatgaag gatctgccag aactgaagct	2760
tgaagtctga ggcagaatct tgtccagggt ctatcggact cttgtgagaa ttaggggctg	2820
acagttgatg gtgacaattt caggggtcagt gactgtctgg tttctctgag gtgaggctgg	2880
aatataggtc accttgaaga ctaaagaggg gtccaggggc ttctgcacag gcagggaaca	2940
gaatgtggaa caatgacttg aatggttgat tcttgtgtga caccaggaat tggcataatg	3000
tctgagttgc ccaggggtga ttctagtcag actctgggggt ttttgtcggg tatagaggaa	3060
aaatccacta ttgtgattac tatgctatgg actactgggg tcaaggaacc tcagtcaccg	3120
tctcctcagg taagaatggc ctctccagggt ctttatTTTT aacctttgtt atggagtttt	3180
ctgagcattg cagactaatc ttggatattt gtccctgagg gagccggetg agagaagttg	3240
ggaaataaac tgtctaggga tctcagagcc tttaggacag attatctcca catctttgaa	3300
aaactaagaa tctgtgtgat ggtgttgggt gagtccctgg atgatgggat agggactttg	3360
gaggctcatt tgaagaagat gctaaaacaa tcctatggct ggagggatag ttggggctgt	3420
agttggagat tttcagtttt tagaataaaa gtattagttg tggaatatac ttcaggacca	3480
cctctgtgac agcatttata cagtatccga tgcataggga caaagagtgg agtggggcac	3540
tttctttaga tttgtgagga atgttccgca ctagattgtt taaaacttca tttgttggaa	3600
ggagagctgt cttagtgatt gagtcaaggg agaaaggcat ctagcctcgg tctcaaaagg	3660

gtagttgctg tctagagagg tctggtggag cctgcaaaag tccagctttc aaaggaacac	3720
agaagtatgt gtatggaata ttagaagatg ttgcttttac tcttaagttg gttcctagga	3780
aaaatagtta aatactgtga ctttaaaatg tgagaggggtt ttcaagtact cattttttta	3840
aatgtccaaa attcttgtca atcagtttga ggtcttgttt gtgtagaact gatattactt	3900
aaagtttaac cgaggaatgg gagtgaggct ctctcataac ctattcagaa ctgactttta	3960
acaataataa attaagtttc aaatatTTTT aaatgaattg agcaatgttg agttggagtc	4020
aagatggccg atcagaacca gaacacctgc agcagctggc aggaagcagg tcatgtggca	4080
aggctatttg gggaagggaa aataaaacca ctaggtaaac ttgtagctgt ggtttgaaga	4140
agtggttttg aaacactctg tccagcccca ccaaaccgaa agtccaggct gagcaaaaca	4200
ccacctgggt aatttgcatt tctaaaataa gttgaggatt cagccgaaac tggagaggtc	4260
ctcttttaac ttattgagtt caacctttta attttagctt gagtagttct agtttcccca	4320
aacttaagtt tatcgacttc taaaatgtat ttagaattca ttttcaaaat taggttatgt	4380
aagaaattga aggacttttag tgtctttaat ttctaataa tttagaaaac ttcttaaaat	4440
tactctatta ttcttccctc tgattattgg tctccattca attcttttcc aatacccgaa	4500
gcatttacag tgactttgtt catgatcttt tttagttgtt tgttttgcc tactattaag	4560
actttgacat tctgggtcaaa acggcttcac aaatcttttt caagaccact ttctgagtat	4620
tcatttttagg agaaagactt tttttttaaa tgaatgcaat tatctagact tatttcagtt	4680
gaacatgctg gttggtgggt gagaggacac tcagtcagtc agtgacgtga agggcttcta	4740
agccagtcca catgctctgt gtgaactccc tctggccctg cttattgttg aatgggcaa	4800
aggtctgaga ccaggctgct gctgggtagg cctggacttt gggctctcca ccagacctg	4860
ggaatgtatg gttgtggctt ctgccacca tccacctggc tgctcatgga ccagccagcc	4920
tcggtggctt tgaaggaaca attccacaca aagactctgg acctctccga aaccaggcac	4980
cgcaaattgt aagccagagg cagccacagc tgtggctgct gctcttaaag cttgtaaact	5040
gtttctgctt aagagggact gagtcttcag tcattgcttt agggggagaa agagacattt	5100
gtgtgtcttt tgagtaccgt tgtctgggtc actcacattt aactttcctt gaaaaactag	5160
t	5161

<210> 8

<211> 4932

<212> DNA

<213> Mus musculus

<400> 8

tagcagggtg tagaggggatc tcctgtctga caggaggcaa gaagacagat tcttaccct	60
ccatttctct tttatccctc tctggctctc agagagtcag tccttcccaa atgtcttccc	120
cctcgtctcc tgcgagagcc ccctgtctga taagaatctg gtggccatgg gctgcctggc	180
ccgggacttc ctgccagca ccatttcctt cacctggaac taccagaaca aactgaagt	240
catccagggt atcagaacct tcccaacact gaggacaggg ggcaagtacc tagccacctc	300
gcagggtgtg ctgtctccca agagcatcct tgaaggttca gatgaatacc tggatgcaa	360
aatccactac ggaggcaaaa acaaagatct gcatgtgcc attccaggta agaaccaaac	420
cctcccagca ggggtgccca ggcccaggca tggcccagag ggagcagcgg ggtggggctt	480
aggccaagct gagctcacac cttgacctt cattccagct gtcgcagaga tgaaccccaa	540
tgtaaatgtg ttcgtcccac cacgggatgg cttctctggc cctgcaccac gcaagtctaa	600
actcatctgc gaggccacga acttcactcc aaaaccgatc acagtatcct ggctaaagga	660
tgggaagctc gtggaatctg gcttcaccac agatccggtg accatcgaga acaaaggatc	720
cacaccccaa acctacaagg tcataagcac acttaccatc tctgaaatcg actggctgaa	780
cctgaatgtg tacacctgcc gtgtggatca cagggggtctc accttcttga agaacgtgtc	840
ctccacatgt gctgccagtg agtggcctgg gctaagccca atgcctagcc ctcccagatt	900
agggaaagtcc tectacaatt atggccaatg ccaccagac atggtcattt gctccttgaa	960
ctttggctcc ccagagtggc caaggacaag aatgagcaat aggcagtaga ggggtgagaa	1020
tcagctggaa ggaccagcat ctcccttaa gtaggtttgg gggatggaga ctaagctttt	1080
ttccaacttc acaactagat atgtcataac ctgacacagt gttctcttga ctgcaggtcc	1140
ctccacagac atcctaacct tcaccatccc cccctcctt gccgacatct tctcagcaa	1200
gtccgctaac ctgacctgtc tgggtctcaa cctggcaacc tatgaaacct tgaatatctc	1260
ctgggcttct caaagtgggtg aaccactgga aaccaaatt aaaatcatgg aaagccatcc	1320
caatggcacc ttcagtgtca aggggtgtggc tagtgtttgt gtggaagact ggaataacag	1380
gaaggaattt gtgtgtactg tgactcacag ggatctgctt tcaccacaga agaaattcat	1440
ctcaaaacct aatggtaggt atccccctt cccttccct ccaattgcag gaccttcct	1500
gtacctcata gggagggcag gtctcttcc acctatcct cactactgtc ttcatttaca	1560
gaggtgcaca aacatccacc tgctgtgtac ctgctgccac cagctcgtga gcaactgaac	1620
ctgagggagt cagccacagt cacctgcctg gtgaagggct tctctcctgc agacatcagt	1680

gtgcagtggc ttcagagagg gcaactcttg cccaagaga agtatgtgac cagtgccccg	1740
atgccagagc ctggggcccc aggcttctac tttaccacaca gcatcctgac tgtgacagag	1800
gaggaatgga actccggaga gacctatacc tgtgtttag gccacgaggc cctgccacac	1860
ctggtgaccg agaggaccgt ggacaagtcc actggtaaacc ccacactgta caatgtctcc	1920
ctgatcatgt ctgacacagg cggcacctgc tattgaccat gctagcgctc aaccaggcag	1980
gccttgggtg tccagttgct ctgtgtatgc aaactaacca tgtcagagtg agatgttgca	2040
ttttataaaa attagaaata aaaaaaatcc attcaaactg cactggtttt gattatacaa	2100
tgctcatgcc tgctgagaca gttgtgtttt gcttgcctcg cacacacctc gcatacttgc	2160
ctccacctg gcccttctc taccttgcca gtttctctc tgtgtgtgaa ctcagtcagg	2220
cttacaacag acagagtatg aacatgcgat tctccagct acttctagat atatggctga	2280
aagcttgctt aacctgggtg aggcagcatt caggcacata tatagacaca catgcattta	2340
tacatagata tataggtaca catgtgtaga cacatacatg aatgtgtatt catggacaca	2400
cagacaaagg tacacatata tacacatgag ttcattgcga cacacatgca tggacactta	2460
caaacgcctt cagagacaaa taggcataga cacacaacca ctcacagaaa cagataccaa	2520
tatgcatggt cctgtgtaca cagaaacaga ctataggcaa atatacaca ataaactata	2580
tagatacaaa gatatgcata tacacacatg tacagaaaca tcttcacatg tgtacactaa	2640
catgtgaaca ggtatagcac acagatacac ctggactctg accagggtg taatctccaa	2700
ggctcacggc tcagagagcc tacactaggc tgggtcactg atactcctca ggagcccact	2760
ctatgattgg gagagataac cccaggtaga aagtatgcct atctgtctca acaccatggg	2820
gcagaagata ctccactaac caccatgac agaaagttag ccttggtgt gtctccatta	2880
atagaacacc tcagaagacc aatgtgaaat tgcctaacc actcacacc accctgatct	2940
ccagttcaaa atgcagaaaa cataatgcag ttgtccaaaa gatgccccaa ccacacacac	3000
acacacacac acacacacac acacacacac acacacacac acacacacac accatcaagg	3060
agcctctgta aggagtcacc acccaataac actgcctctt tgggtcata tcttgacat	3120
tcttcatatt catatccatt tggggcctag gctttagata tcccaagggt ctcattctta	3180
cagggatcag agatcccaat aaatgcctg gtcccacagc ctccctcagg tatctgtctg	3240
tttatctctt ggtaccaaga cccaacattg ctggcagggg taggacaagc aacgcacggg	3300
aactctgatc aaagaaagtc atgagatgcc tgagtccttc aggaagtaag gagggacaac	3360

ctctggtatc cctgttctta ttgctaaagc ccaagagaca gggagacctg ctctaaattc	3420
tcagtctaaa cagcaccgat ggcaccacct gctcagggaa agtccagagc acaccaatat	3480
cattttgcca cagtctctga gtctgccttt acccaggtcc atacattgca tctgtcttgc	3540
ttgctctgct gccccagggc tcctggaaca aaggctccaa attagtgtgt cctacagctt	3600
ggcctgttct gtgcctccgt ctagcttgag ctattagggg accagtcaat actcgctaag	3660
attctccaga accatcaggg caccccaacc cttatgcaa tgctcagtca cccaagact	3720
tggcttgacc ctccctctct gtgtcccttc atagaggggg aggtgaatgc tgaggaggaa	3780
ggctttgaga acctgtggac cactgcctcc accttcacg tcctcttcct cctgagcctc	3840
ttctacagca ccaccgtcac cctgttcaag gtagtgtggt tgtggggctg aggacacagg	3900
gctgggacag ggagtcacca gtccctactg cctctacctc tactccctac aagtggacag	3960
caattcacac tgtctctgtc acctgcaggt gaaatgactc tcagcatgga aggacagcag	4020
agaccaagag atcctcccac agggacacta cctctggggc tgggatacct gactgtatga	4080
ctagtaaact tattcttacg tctttcctgt gttgccctcc agctttttatc tctgagatgg	4140
tcttctttct agactgacca aagacttttt gtcaacttgt acaatctgaa gcaatgtctg	4200
gccacagac agctgagctg taaacaaatg tcacatggaa ataaatactt tatcttgtga	4260
actcacttta ttgtgaagga atttgttttg tttttcaaac ctttcctgcg gtgttgacag	4320
cccaaggatt atctgaatag agcttaggaa ctggaaatgg aacagtgcag tctgatggta	4380
cttaagggag aaagagggaa aggaggtgtg gaagaagaaa aaagagaagc agagggggag	4440
gggagaaggg agagggagag ggagagggag agggagaggg agagggagag ggagagagag	4500
agagagagag agagagagag agagagagag agagagcatg cactctaaca gcaaagtaca	4560
acacaggcag ccaatggata gcactctggt tatctaccct gatggaagaa ggggaagtagg	4620
gcagagaaaa ttccaggcct aatctcccaa aagcaacaga acctggaaac tagcctctag	4680
ccttaggtct ctgctctgtc ccagcccac catcttgggc tgggtgttgc tcaagctagt	4740
aatttaggtc ttatcccaa gctttgtggt atgtgggtgt gcctttgggg agttggctga	4800
gattttgaag atgtttgtac ctctcccaca acatgacaag ccctaggggt tagtcaataa	4860
ctcaaattct ctgtctatga caactgctgt atgactatat gaagaaatgg gataaagatg	4920
ctatagtcac tc	4932